Yusen Peng

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Education

The Ohio State University   *August 2026 – May 2032*
PhD in Computer Science and Engineering
- Advisor: Prof. Sachin Kumar
- Research interest: training and inference efficiency in multimodal LLMs
- Ongoing project: dynamic image tokenization for efficient MLLMs (e.g., LLaVA, QwenVL)

The Ohio State University   *August 2022 – May 2026*
B.S. in Computer Science and Engineering
Honors Research Distinction
- GPA: Summa Cum Laude
- AI Coursework: Natural Language Processing, Computer Vision, Machine Learning, Data Mining

Publications

CE-Bench: Towards a Reliable Contrastive Evaluation Benchmark of Interpretability of Sparse Autoencoders
Alex Gulko*, Yusen Peng*, Sachin Kumar
Proceedings of the 8th BlackboxNLP Workshop at EMNLP 2025
Domains: Mechanistic Interpretability; Datasets & Benchmarks

CascadeFormer: A Family of Two-stage Cascading Transformers for Skeleton-based Human Action Recognition
Yusen Peng, Alper Yilmaz
arXiv 2025, under review
Domains: Action Recognition; Transformer-based Architecture

pytskit: A Comprehensive Time Series Toolkit
Fan Yang, Yusen Peng, Tomasz Frelek, Frank Li, Qiao Xiao, and Mark Kikta, John Paparrizos
under review
Domains: Time Series Analysis; Open-source ML Software

SVD^3: Singular Value Decomposition for Visual Geometry Model Compression
Yusen Peng, Haoxuan Wang, Jiachen Tao, Yan Yan
under review
Domains: Low-rank Approximation (SVD); 3D Vision

Lower-quality public housing corresponds to elevated flood risk and social disadvantage
Woi Sok Oh, Kelsea Best, Meri Davlasheridze, Yusen Peng.
under review
Domains: Regression Modeling; Data Analytics

Awards

Honorable Mention for CRA Outstanding Undergraduate Researcher Award

Undergraduate Research Scholarship awarded based on Honors Thesis proposal

Academic Service

Conference Reviewer: reviewed 3 papers at NeurIPS 2025 Mechanistic Interpretability Workshop

Teaching

Teaching Assistant for CSE 2331: Data Structures and Algorithms   *Aug 2024 – Present*
Teaching Assistant for CSE 2221: Software Components   *Aug 2023 – Dec 2023*